# CW == Enerji

## **BIFACIAL TOPCON MONOCRYSTALLINE • 108TNB10**

# CW ENERJİ Haf Cut DOUBLE GLASS **High Conversion Efficiency** High panel efficiency to guarantee high power output Self-Cleaning And Anti-Reflection Glass Coating glass for self-cleaning reduces surface dust **Outstanding Low Irradiation Glass** Outstanding panel performance even in weak light conditions

**16BB** n-Tvpe

ling lave

**Excellent Durability** Wind load up to 2400 Pa, Snow load up to 5400 Pa



 $\mathbf{F}$ 

 $0 \sim +5$ Wp Positive Power Tolerance

**Easy Installation** 



## **Twice EVA Laminated Double Glass**



CWT450-108TNB10 450 Wp CWT445-108TNB10 445 Wp CWT440-108TNB10 440 Wp CWT435-108TNB10 435 Wp











IEC 61215, IEC 61730-1, IEC 61730-2 ISO 9001:2015, ISO 14001:2015, ISO 45001:2018

Minority carrier restrain

.... Majority carrier pass

Low resistance loss and high Voc

CWI

SOLAR

PANEL

www.cw-enerji.com

## **ELECTRICAL CHARACTERISTICS**

Model Type	CWT435 108TNB10	CWT440 108TNB10	CWT445 108TNB10	CWT450 108TNB10		
Peak Power (Pmax)	435 Wp	440 Wp	445 Wp	450 Wp		
Module Efficiency	22.28	22.53	22.79	23.04		
Maximum Power Voltage (Vmp)	32.54	32.74	32.94	33.14		
Maximum Power Current (Imp)	13.37	13.44	13.51	13.58		
Open Circuit Voltage (Voc)	38.51	38.71	38.91	39.11		
Short Circuit Current (Isc)	14.17	14.24	14.31	14.38		
Power Tolerance	0~+5W					
Maximum System Voltage	1500V DC					
Operating Temperature	-40 ~ +85°C					
Protection Class	Class II					
Maximum Series Fuse Rating	25A					

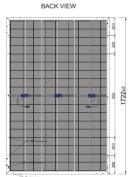
## **MECHANICAL SPECIFICATIONS**

Cell Dimensions(mm)	182x91		
Cells per Module(pcs)	108 (6x18)		
Weight(kg)	24.0		
Panel Dimensions(mm)	1722x1134x30		
Max. Wind/Snow Load(Pa)	2400/5400		
Junction Box	IP68		
Junction Box Cable Length(mm)	350-1600		
Glass Thickness (mm)	2.0 / 2.0		

## **PHYSICAL CHARACTERISTICS**

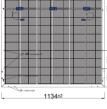
722± 1134±2

FRONT VIEW





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## **TEMPERATURE CHARACTERISTICS**

(445W Front Power Referenced)

Rear Side Power Gain	5%	10%	15%	20%	25%
Peak Power (Pmax)	467.25	489.50	511.75	534.00	556.25
Short Circuit Current (Isc)	15.03	15.75	16.46	17.18	17.89
Open Circuit Voltage (Voc)	38.71	38.91	38.91	38.91	38.91
Maximum Power Current (Imp)	14.19	14.86	15.54	16.21	16.89
Maximum Power Voltage (Vmp)	32.94	32.94	32.94	32.94	32.94

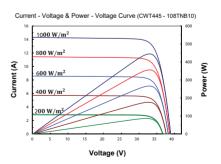
### **TEMPERATURE CHARACTERISTICS**

Temp. Coeff. of (Isc)	0.040%/°C		
Temp. Coeff. of (Voc)	-0.260%/°C		
Temp. Coeff. of (Pmax)	-0.30%/°C		

## **PACKING CONFIGURATION**

Container	40' HC
Pieces per Pallet	35
Pieces Per Container	910
Pallet Per Container	26

## **ELECTRICAL CHARACTERISTICS**



\* The specifications are obtained under the standard test conditions: 1000W/m2 solar irradiance, 1.5 Air Mass and cell temperature of 25°C. Measurement uncertainty for all panels is 3%. The actual transactions will be subject to the contracts. These parameters are for reference only and it is not a part of the contracts. The technical specifications in this document may vary. For more information, refer to the "Installation Manual".

\* For roof, facades and installations on similar surfaces, solar panels should be mounted over a fire-resistant covering suitable for this application, with adequate ventilation between the back of the solar panels and the mounting surface. Improper installations are hazardous and may spark a fire. Solar panels must not be mounted on structures and roofs which are made of not fire-resistant materials such as plastic layer, transparent plastic, PVC or similar materials without any fire-protection layer. Usage and installation not in accordance with the guidelines as outlined in the installation manual will terminate the warranty. Please refer to the installation manual and the warranty documents for further details. \* CW Energi reserves the right to change the specification of products without prior notice.

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